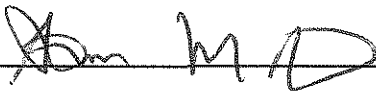
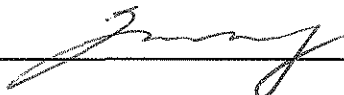


PUBLIC UTILITIES DEPARTMENT
CITY OF SAN DIEGO


APPROVED MATERIALS LIST
FOR WATER

A handwritten signature in black ink, appearing to read "Stan Medina", is written over a horizontal line.

STAN MEDINA
DEPUTY DIRECTOR
WATER OPERATIONS

A handwritten signature in black ink, appearing to read "Guann Hwang", is written over a horizontal line.

GUANN HWANG
DEPUTY DIRECTOR
BUSINESS SUPPORT

A handwritten signature in black ink, appearing to read "Jim Fisher", is written over a horizontal line.

JIM FISHER
WATER CHIEF ENGINEER
WATER OPERATIONS

NOVEMBER 2009

CITY OF SAN DIEGO WATER DEPARTMENT

APPROVED MATERIALS LIST

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*References are to the 2009 edition of the Standard Specifications for Public Works Construction or the latest version of the AWWA Standards and ASTM Specifications.
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Forward for 2009 Revisions

Suggested changes in the approved materials are still requested and will be reviewed. In order to keep the listing updated, it is necessary that anyone with pertinent information keep the committee updated.

Materials other than shown on this list may be used when approval has been obtained for their use.

Materials called out on subdivision plans may require specifications to be included with the subdivision plans. This will be the case of any material not covered by the referenced specifications* for the subdivision.

***References are to the 2009 edition of the Standard Specifications for Public Works Construction or the latest version of the AWWA Standards and ASTM Specifications.
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CITY OF SAN DIEGO WATER DEPARTMENT
APPROVED MATERIALS LIST
WATER DISTRIBUTION

SUBJECT	SPEC. REF.	MANUFACTURER (Series/Model No.)	ADDITIONAL REQUIREMENTS
<u>A. Bronze Water Services</u> <u>Fittings for Iron Pipe,</u> <u>Plastic, and Copper Tubing</u>	*207-26.1	(Refer to section G, page 7 for model numbers).	Minimum 150 psi working pressure.
(1) Corporation Stop, Curb Stop, Property Valve, Coupling, Compression Fittings, or Flared Copper Type only.		The James Jones Company Ford McDonald Mueller	
(2) Adaptors, Bends,, Compression Fittings, or Flared Copper Type only.			
(3) Service Saddle (double-bronze straps and nuts for pipe other than PVC).		The James Jones Company (J-979) Ford (202B) Mueller (H-16000) Romac Industries (202B)	
(4) Service Saddle (full support for PVC C-900 pipe, 4" through 12", unless otherwise noted). All SStl. Saddles		Smith-Blair (373) Romac Industries (306)	
Bronze Saddle w/SStl.Strap		Smith-Blair(323) Romac Industries The James Jones Company (J-969) APAC (113) Ford (202B)	

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CITY OF SAN DIEGO WATER DEPARTMENT
APPROVED MATERIALS LIST
WATER DISTRIBUTION

SUBJECT	SPEC. REF.	MANUFACTURER (Series/Model No.)	ADDITIONAL REQUIREMENTS
B. <u>Water Services</u>			
(1) Polyvinyl Chloride Pipe (PVC) With Schedules 40 & 80 socket solvent weld type fittings		Lasco Spears	
(2) Copper Tube, Type "K" (soft) 1" & 2" diameters	*207-26.1	Mueller Brass Cerro Copper Products Cambridge-Lee Industries, Inc.	

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CITY OF SAN DIEGO WATER DEPARTMENT
APPROVED MATERIALS LIST
WATER DISTRIBUTION

SUBJECT	SPEC. REF.	MANUFACTURER (Series/Model No.)	ADDITIONAL REQUIREMENTS
<u>C. Valves</u> (1) Gate Valves 3" thru 48" diameter (a) All internal parts to be bronze (b) 12" diameter and larger to have by-passes 16" diameter and larger to be mounted horizontally with by-passes and enclosed gear cases 3" thru 12" diameter - 200 psi working pressure 16" thru 48" diameter - 150 psi working pressure (2) Resilient-Wedge Gate Valves 2" thru 12" diameter (NRS)	*207-26.3 AWWA C-500	Mueller (A2380-9206) Kennedy Valve Company/ Clow American Flow Control M & H (Dresser) K-Flow	EPDM rubbers
		M & H / Kennedy Valve Company./ Clow American AVK (Series 25) Stockham U. S. Pipe Metroseal (250) Mueller	EPDM rubbers

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CITY OF SAN DIEGO WATER DEPARTMENT
APPROVED MATERIALS LIST
WATER DISTRIBUTION

SUBJECT	SPEC. REF.	MANUFACTURER (Series/Model No.)	ADDITIONAL REQUIREMENTS
C. Valves (cont.)			
(3) Rubber-Seated Butterfly Valves 6" thru 48" diameter	*207-26.4 AWWA C-504	Pratt K-Flow	Class 150 EPDM rubber
6" thru 12" diameter		M & H (Dresser) Mueller	EPDM rubber
16" thru 48" diameter		Kennedy Valve Company American Flow Control	EPDM rubber
6" thru 12" diameter	*207-26.4.1	Pratt K-Flow	Class 250 EPDM rubber
3" thru 120" diameter	*207-26.4 AWWA C-504, C111 & C-550	DeZURIK C/O CS-amsco	
(4) Combination Air & Vacuum Valves, 1", 2", 3", & 4" diameters All internal parts to be stainless steel		APCO (143C, 145C, 147C, 149C) Val-Matic (201C, 202C) GA Industries, Inc. (#945) Crispin (10UL, 20UL, 30UL, 40UL)	
(5) Automatic Control Valves		CLA-VAL Co. GA Industries, Inc.	Globe/Angle Pattern only
(6) Standard Plug Valves (PEC) 100% Ported Plug Valves (PEF) 1/2" thru 72" diameter	*207-26.5 AWWA C-517, C-111, C-550	DeZURIK C/O CS-amsco (Models PEC & PEF)	
C. Valves (cont.)			

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CITY OF SAN DIEGO WATER DEPARTMENT
APPROVED MATERIALS LIST
WATER DISTRIBUTION

SUBJECT	SPEC. REF.	MANUFACTURER (Series/Model No.)	ADDITIONAL REQUIREMENTS
<p>(6) Fire Hydrants Wet Barrel Fire Hydrants for Ordinary Water Works Service</p> <p>Sizes: 6"x4"x2.5" – 2 ports 6"x4"x2.5"x2.5" – 3 ports</p>	<p>*207-26.2 AWWA C-503 SDW-104</p> <p>*207-26.2 AWWA C-503 & C-550 SDW-104</p>	<p>Clow Ranger (950, 960, 850, 860)</p> <p>James Jones Co. J4040CR J4060CR</p>	<p>Hydrants with one- piece barrel only, no welded ports allowed.</p> <p>San Diego Drill Pattern 6-hole pattern with a 0.88 drilling on a 9.50 diameter bolt circle.</p>
<p>(7) Polyethylene Air and Vacuum Valve Enclosure Sizes: 18"x30" 14"x24"</p>		<p>Pipeline Products, Inc.</p> <p>VCAS 1830 VCAS 1424</p>	

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<p align="center"><u>CITY OF SAN DIEGO WATER DEPARTMENT</u> <u>APPROVED MATERIALS LIST</u> <u>WATER DISTRIBUTION</u></p>			
SUBJECT	SPEC. REF.	MANUFACTURER (Series/Model No.)	ADDITIONAL REQUIREMENTS
D. <u>Meter Boxes</u>			
(1) Concrete Meter Box	*207-26.1 SDW 113	Brooks Products San Diego Precast Eisel Enterprises (Nos. 6 and 37)	
(2) Polymer-Concrete Meter Box		Armorcast Products CDR (1" only)	

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CITY OF SAN DIEGO WATER DEPARTMENT
APPROVED MATERIALS LIST
WATER DISTRIBUTION

SUBJECT	SPEC. REF.	MANUFACTURER (Series/Model No.)	ADDITIONAL REQUIREMENTS
<u>E. Water Distribution</u> <u>Pressure Pipe</u>			
(1) Polyvinyl Chloride (PVC) Pipe Class 150 or 200 4" thru 12" diameter	*207-25 AWWA C-900	Any Manufacturer Meeting Specifications	Marking - Pressure Class PVC 1120 NSF Certification Pipe ends - plain /gasket bell couplings
(2) Ductile Iron (DI) pipe 4" thru 54" diameter	*207-9 AWWA C-111 AWWA C-104 AWWA C-105	Any Manufacturer Meeting Specifications	
(3) Polyvinyl Chloride (PVC) Pipe 14" thru 36" diameter	*207-25.1 AWWA C-905 DR-18	Any Manufacturer Meeting Specifications	Pressure Rating 235 psi

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CITY OF SAN DIEGO WATER DEPARTMENT
APPROVED MATERIALS LIST
WATER DISTRIBUTION

SUBJECT	SPEC. REF.	MANUFACTURER (Series/Model No.)	ADDITIONAL REQUIREMENTS
<u>F. Water Distribution</u> <u>Miscellaneous</u>			
(1) Ductile Iron Fittings and Joints For DI & PVC pipe, short body, cement lined	*207-9 AWWA C-110 AWWA C-111 AWWA C-153	Any Manufacturer Meeting Specifications	Only mechanical joint fittings shall be used on PVC pipe
(2) Tapping Sleeve 4" thru 20" diameter		APAC (502) Baker (428) Ford (FTSC) Mueller (H619) Smith-Blair (622) JCM Industries (412) Romac Industries (FTS420)	
(3) Stainless Steel Bands (Repair Clamps)		JCM 101, 210, 211, 301) Ford (FS1, FS2) Romac Industries (SS1, SS2) Cascade (CR1. CR2. CR3)	
(4) Flex Couplings		Mueller	
(5) Restraining Joints		Mega Lug	To be Approved by Engineer

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CITY OF SAN DIEGO WATER DEPARTMENT
APPROVED MATERIALS LIST
WATER DISTRIBUTION

G. BRONZE WATER SERVICE FITTINGS		COMPRESSION/PACKING		FLARED COPPER		MISCELLANEOUS
TYPE	SIZE	MANUFACTURER'S MODEL NUMBERS FORD JONES McDONALD MUELLER		MANUFACTURER'S MODEL NUMBERS FORD JONES McDONALD MUELLER		MANUFACTURER'S MODEL NUMBERS FORD JONES MUELLER
CURB STOP, ANGLE, BALL IPS THREAD TO METER PVC SCH 40 TO METER (elongated holes for 12" & 2" meters)	2" 2"	---	---	---	---	FV13-777W J-1527F H-14286
TUBING TO METER TUBING TO METER (elongated holes for 12" & 2" meters)	1" 2"	BA43-444W J-1963W 4602B-22 B-24258 BF43-777W J-1975W 4604-B B-24276		BA23-444W J-1973W 4602B B-24255 BFA23-777W J-1964W ---		---
CORP STOP, BALL MIP TO MIP MIP TO PVC SCH 40 MIP TO TUBING MIP TO TUBING	2" 2" 12" 2"	--- J-1943 3131-B --- FB-1102 J-1977 4704B-44 B-25025 FB-1100 J-1935 4704B-22 B-25008 FB-1100 J-1935 4704B-22 B-25028		--- FB-700 J-1930 4701B B-25000 FB-700 J-1930 4704B B-25025		FB-500 J-1943 H-9969
COUPLING, ADAPTOR FIP TO IPS FIP TO PVC, IPS FIP TO TUBING MIP TO PVC, IPS MIP TO TUBING MIP TO TUBING	1" 2" 2" 2" 1" 2"	C16-44 J-2608 4754-33 H-15454 C17-44 J-2640 4754-44 C14-77 J-2607 4754-22 H-15451 C87-77 J-2640 4753-44 C84-44 J-2605 4753-22 H-15428 C84-77 J-2605 4753-22 H-15428		C21-77 J-1535 4754 H-15450 C28-44 J-1531 4753 H-15425 C28-77 J-1531 4753 H-15425		---
COUPLING, STRAIGHT METER TAIL METER TAIL PVC TO PVC SCH 40 TUBING TO TUBING TUBING TO TUBING	1" : 2" 1" 2"	--- C77-77 J-2642 4758-44 C44-44 J-2609 4758-22 H-15403 C44-77 J-2609 4758-22 H-15403		C22-44 J-1528 4758 H-15400 C22-77 J-1528 4758 H-15400		C-38 J-130 H-10890 C-38 J-130 H-10890

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WATER DISTRIBUTION

G. BRONZE WATER SERVICE FITTINGS		COMPRESSION/PACKING	FLARED COPPER	MISCELLANEOUS
TYPE	SIZE	MANUFACTURER'S MODEL NUMBERS FORD JONES McDONALD MUELLER	MANUFACTURER'S MODEL NUMBERS FORD JONES McDONALD MUELLER	MANUFACTURER'S MODEL NUMBERS FORD JONES MUELLER
PACKING JOINT, 90° ELBOW TUBING TO TUBING	2"	L44-77 J-2611 4761.22 H-15526	C22-77 J-1552 4761 H-15525	--- --- ---
VALVE, METER FIP TO METER	1"	B13-444 J-1908 6101-MHB B-24351 w/6120 w/B20248 HANDLE HANDLE	--- --- ---	--- --- ---

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